



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9
75 Hawthorne Street
San Francisco, California

August 6, 2010

Ms. Carol Castillo
Controller
Fred R. Rippy, Inc.
12471 E. Washington Blvd
Whittier, CA 90602
ccastillo@fripppy.com

RE: Omega Chemical Corporation Superfund Site, Indoor Air Sampling

Dear Ms. Castillo,

As you know, the Omega Chemical Site PRP Organized Group (OPOG) conducted air sampling at your facility on July 1, 2010. The purpose of this sampling effort was to assess and monitor whether contamination originating from the Omega Chemical Corporation Superfund Site is migrating through soil into buildings and impacting indoor air quality. This vapor migration pathway is referred to as vapor intrusion. Enclosed is a fact sheet that provides more detail on vapor intrusion.

The purpose of this letter is to provide information regarding the indoor air samples collected at your facility on July 1, 2010 by CDM on behalf of OPOG. A limited number of duplicates and a "split" sample analyzed by an independent laboratory were also collected at the direction of EPA.

The data are presented in a summary table in Attachment A. This table provides a summary of the results and the outdoor (ambient) air results taken on the same day.

Based on the results, some indoor air contaminant levels at FR Rippy for Trichloroethene (TCE) and Tetrachloroethene (PCE) are greater than EPA's long-term exposure criteria, but less than EPA's short-term exposure criteria. Because the measured indoor air contaminant levels are below the short-term criteria, EPA does not expect that these levels would cause adverse health effects for workers in these buildings over the short term.

Some indoor Air contaminant levels exceed the concentrations for short-term exposures developed by the Agency for Toxic Substances and Disease Registry (ATSDR) as Intermediate Minimal Risk Levels (MRLs) using residential exposure assumptions for periods of more than 14 but less than 365 days. Exceeding these ATSDR MRLs suggests that further evaluation is necessary but does not necessarily mean that a problem exists. Further note that the MRL values

assume continuous (24 hours per day, 7 days per week) exposure and have not been adjusted for occupational exposures (8 hours per day, 5 days per week).

TCE and PCE are the contaminants we find are generally present at the highest levels relative to the health protective criteria. However, as discussed with you on the telephone, the ratios of TCE to PCE in the three FR Rippy samples (ranging from approximately 12:1 to 71:1) represent a significant signature change from the other buildings sampled in the area, where PCE is the predominant compound detected. This signature change indicates that a source other than the former Omega property is likely contributing to the indoor air concentrations in the FR Rippy buildings. We are reviewing available information and evaluating the need for additional field work to identify the source of the TCE.

The next steps are to have OPOG, under the direction of EPA, re-sample your facility on August 25, 2010. In the meantime, we provide FR Rippy with the following recommendations:

- o FR Rippy should operate their Heating Ventilation and Air Conditioning (HVAC) fans 24 hours a day, seven days a week. Per OPOG's building assessment, there are three AC units in the office space and three AC units in the production room.
- o The majority of the production area and the entirety of the warehouse are naturally ventilated by doors and windows. Natural ventilation (open doors and windows) should be increased, where possible.

In addition, OPOG will be submitting their FR Rippy building assessment report to EPA next week, and we will provide you with a copy. The report will include a chemical use inventory and a conduit assessment.

If you have any questions regarding the data or would like to discuss our interpretation of the results, please call me at (415) 947-4183.

Sincerely,



Lynda Deschambault
Superfund Project Manager
(415) 947-4183

Enclosures

Cc: Lori Parnass, California EPA Department of Toxic Substances Control
Ed Modiano, Omega Chemical Site PRP Organized Group
Fred Schauffler, USEPA
Stan Smucker, USEPA
Stephen Berninger, USEPA

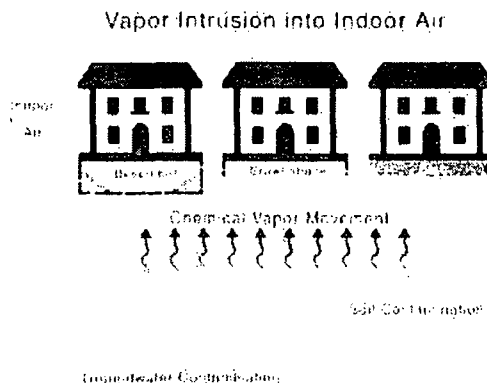


What You Should Know About Vapor Intrusion

EPA has developed this fact sheet to answer some of the most commonly asked questions about an important health issue called vapor intrusion. Vapors and gases from contaminated groundwater and soil have the potential to seep into indoor spaces and cause health problems.

What is vapor intrusion?

When chemicals or petroleum products are spilled on the ground or leak from underground storage tanks, they can give off gases, or vapors that can get inside buildings. Common products that can cause vapor intrusion are gasoline or diesel fuel, dry cleaning solvents and industrial de-greasers. The vapors move through the soil and seep through cracks in basements, foundations, sewer lines and other openings. Vapor intrusion is a concern because vapors can build up to a point where the health of residents or workers in those buildings could be at risk. Some vapors such as those associated with petroleum products have a gasoline odor, others are odor-free.



Can vapors in my home come from household sources?

Common household products can be a source of indoor air problems. Vapors and gases can come from: paints; paint strippers or thinners; moth balls; new carpeting and furniture; stored fuel; air fresheners; cleaning products; dry cleaned clothing and even cigarette smoke.

What are the health concerns related to vapor intrusion?

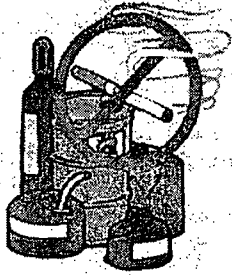
When vapor intrusion does occur, the health risk will vary based on the type of chemicals, the levels of the chemical found, the length of exposure and the health of exposed individuals. Some people may experience eye and respiratory irritation, headaches and/or nausea. These symptoms are temporary and should go away when the vapors are addressed. Low-level chemical exposures over many years may raise the lifetime risk of cancer or chronic disease.

How is vapor intrusion discovered?

Samples of gas in the soil or groundwater are first collected near a contaminated site. If no contamination is found near a site, then vapor intrusion should not be a problem. If contamination is found, depending on the type, the search may be widened to include samples closer to or on individual properties. The next step is to take vapor samples from the soil under the home's foundation; these are called slab, or sub-slab samples. EPA does not generally recommend indoor air sampling before slab or sub-slab sampling, because indoor air quality varies widely day to day. Also, household products may interfere with sampling results.

What happens if a problem is found?

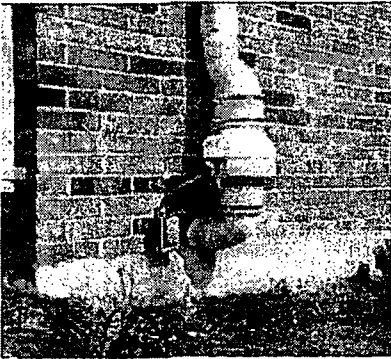
The most common solution is to install systems often used to reduce naturally occurring radon that seeps into homes in some geographic areas. These systems, called radon mitigation systems, remove soil vapors from below basements or foundations before they enter homes. Vapors are vented outside of the homes where they become dispersed and harmless. These systems use minimal electricity and do not affect heating and cooling efficiency. They also prevent radon from entering homes – an added health benefit especially in radon prone areas. Once the source of the vapors is eliminated, the systems should no longer be needed.



Vapor Intrusion: Tightly seal common household products after use and seal them in an area that is well ventilated to avoid the release of vapors

What can I do to improve indoor air quality?

- Don't buy more chemicals than you need.
- Store unused chemicals in appropriate tightly-sealed containers.
- Don't make your home too air tight. Fresh air helps prevent chemical build-up and mold growth.
- Fix all leaks promptly, as well as other moisture problems that encourage mold.
- Check all appliances and fireplaces annually.
- Test your home for radon. Test kits are available at hardware and home improvement stores or you can call the Radon Hotline at 800-458-1158 in New York State, or 800-648-0394 in New Jersey.
- Install carbon monoxide detectors in your home. They are available at hardware and home improvement stores.



Sub-slab mitigation system: This system draws radon and other vapors out of the soil and vents them outside

For more information:

- For health related questions regarding vapor intrusion, contact your local health department or the federal Agency for Toxic Substances and Disease Registry at: 1-888-422-8737 or visit their Web site at www.atdsr.cdc.gov
- For more detailed information on EPA's vapor intrusion sampling, visit the EPA's Web site at: www.epa.gov/correctiveaction/eis/vapor/guidance.pdf
- For more information on indoor air quality, visit EPA's Web site at: www.epa.gov/air/topics/comoria.html or call the indoor air Quality Information hotline at 1-800-438-4318

Table 6

Indoor Air Sampling Results - July 1, 2010

Fred R. Rippy - 12471 E. Washington Blvd.

FRR1 through FRR3 (and FRR1 duplicate)

Omega Chemical Corporation Superfund Site, Whittier California

Chemical Name	Air Concentrations						Health Protective Screening Criteria			
	Indoor Building (ug/m ³)				Outdoor Air ³		Long-Term Exposure ¹		Short Term Exposure ²	
	minimum		maximum ⁴		ug/m ³		ug/m ³	Key	ug/m ³	Key
1,1,1-Trichloroethane (1,1,1-TCA)	0.18	U	7.6	U	0.20	U	22,000	nc	3,800	nc
1,1,2,2-Tetrachloroethane (1,1,2,2-PCA)	0.23	U	9.6	U	0.24	U	0.21	ca	—	—
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	6.6	U	7.6		0.73		130,000	nc	--	--
1,1,2-Trichloroethane	0.18	U	7.6	U	0.20	U	0.77	ca	—	—
1,1-Dichloroethane	0.14	U	5.7	U	0.14	U	7.7	ca	—	--
1,1-Dichloroethene (1,1-DCE)	5.6	U	10		0.11		880	nc	79	nc
1,2-Dichlorobenzene	0.20	U	8.4	U	0.22	U	880	nc	--	--
1,2-Dichloroethane	0.59		0.60		0.15		0.47	ca	—	—
1,4-Dichlorobenzene	5.1	U	9.4		0.22	U	1.1	ca	1,200	nc
Acetone	30		49	J	21		140,000	nc	31,000	nc
Benzene	0.92		0.94		0.95		1.6	ca*	19	nc
Carbon Tetrachloride	0.40		0.41		0.42		2.0	ca	190	nc
Chlorobenzene	0.15	U	6.4	U	0.16	U	220	nc	—	—
Chloroform	0.33		0.33		0.19		0.53	ca	240	nc
cis-1,2-Dichloroethene	0.13	U	5.6	U	0.14	U	—	—	—	--
Dichlorodifluoromethane (Freon 12)	2.6		2.7		2.7		880	nc	—	—
Ethylbenzene	0.30		0.30		0.25		4.9	ca	3,000	nc
m,p-Xylenes	0.73		0.74		0.57		3,100	nc	2,600	nc
Methyl tert-butyl ether	0.60	U	5.0	U	0.64	U	47	ca	2,500	nc
Methylene Chloride	1.7		5.1		1.4		26	ca	1,000	nc
o-Xylene	0.25		0.29		0.19		3,100	nc	2,600	nc
Tetrachloroethene (PCE)	12		14		0.42		21	ca	—	—
Toluene	3.0		9.2		2.6		22,000	nc	—	--
trans-1,2-Dichloroethene	0.67	U	5.6	U	0.71	U	260	nc	800	nc
trans-1,3-Dichloropropene	0.15	U	6.4	U	0.16	U	3.1	ca*	36	nc
Trichloroethene (TCE)	140		990		0.38		61	ca	540	nc
Trichlorofluoromethane (Freon 11)	4.0		4.1		1.8		3,100	nc	—	--
Vinyl chloride	0.043	U	3.6	U	0.046	U	2.6	ca	77	nc

ug/m³ = micrograms per cubic meter of air

— = value not available

U = Chemical not detected. Lab detection limit for chemical is listed.

J = Quantitatively estimated

Bold value = measured value exceeds 3 times the outdoor air conc and either the Long-Term or Short-Term Protective Screening criteria.

nc = noncancer

ca = cancer

Notes on Health Protective Screening Criteria:

¹ **Long-Term Exposure Criteria:** These air concentration values correspond to a 1 in one-million lifetime cancer risk (indicated by "ca") for suspected cancer-causing substances (i.e., carcinogens). For chemicals that are not carcinogens, the air concentration values are protective of noncancer effects, (indicated by "nc") using standard U.S. Environmental Protection Agency (EPA) exposure assumptions for commercial use. (<http://www.epa.gov/region09/superfund/prg/index.html> [May 2010]). Exceeding these EPA Industrial Air Regional Screening Levels (RSL) suggests that further evaluation is necessary but does not necessarily mean that a problem exists.

² **Short Term Exposure Criteria:** These values represent health protective air exposure concentrations for short-term exposures, developed by the Agency for Toxic Substances and Disease Registry (ATSDR) as Intermediate Minimal Risk Levels (MRLs) using residential exposure assumptions for periods of more than 14 but less than 365 days. (<http://www.atsdr.cdc.gov/mrls/>) [December 2009]. Exceeding these ATSDR MRLs suggests that further evaluation is necessary but does not necessarily mean that a problem exists. Further note that the MRL values assume continuous (24 hours per day, 7 days per week) exposure and have not been adjusted for occupational exposures (8 hours per day, 5 days per week).

- Risk Value calculated by dividing measured indoor air concentrations by long-term health protective screening criteria. If chemical is designated as cancer (ca), risk value is multiplied by 1e-6

Sources:

³ Ambient Air Sample AA8⁴ Maximum detected concentration.